

Filling fibrous electrode formers with active paste - using moulding process with the application of isostatic pressure

Patent Number: DE4103546
Publication date: 1992-08-13
Inventor(s): IMHOF OTWIN DR ING (DE); KISTRUP HOLGER DR (DE)
Applicant(s):: DEUTSCHE AUTOMOBILGESELLSCH (DE)
Requested Patent: ☐ DE4103546
Application Number: DE19914103546 19910206
Priority Number(s): DE19914103546 19910206
IPC Classification: C23C18/34 ; H01M4/20 ; H01M4/44 ; H01M4/52 ; H01M4/75
EC Classification: H01M4/04, H01M4/26, H01M4/36, H01M4/62, H01M4/80
Equivalents:

Abstract

A process is disclosed for filling fibrous structure electrode formers for accumulators, which are fitted with current leads, with a flowable active paste under the effect of pressure. The process comprises 1) introducing the electrode former plus an amt. of active paste corresp. to the former's pore volume into a press mould with a flat base and with prismatic or cylindrical sidewalls corresp. to the outline of the electrode former; 2) slowly inserting a sealed moulding plug with a flat end face into the press mould from the open face, down to a mechanically predetermined distance between the end face of the moulding plug and the base of the mould; wherein 3) the active paste is uniformly pressed into the pores of the fibre-structure electrode former by means of isostatic pressure acting uniformly over the whole volume of the electrode former, and the electrode former is simultaneously sized w.r.t. its wall thickness.

ADVANTAGE - The process makes it possible to mfr. a filled, fibrous accumulator electrode structure in one process step, compared with several steps required hitherto (sizing, filling, cleaning, and further sizing). The electrode structure has a constant thickness and good quality surface finish.

Data supplied from the esp@cenet database - I2

BEST AVAILABLE COPY